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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/533,720	05/03/2005	Kam Choon Kwong	SG 020031	7853

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS
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EXAMINER

HU, RUI MENG

ART UNIT	PAPER NUMBER
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2631

DATE MAILED: 09/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

10/533,720

Applicant(s)

KWONG, KAM CHOON

Examiner

RuiMeng Hu

Art Unit

2631

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 5/3/2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☒ Claim(s) 1 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 May 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12/27/2005.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. The information disclosure statements (IDS) submitted on 12/27/2005 has been considered by the examiner and made of record in the application file.

Claim Objections

3. **Claim 1** is objected to because of the following informalities:
 - a) On **line 8**, replace "capacitor" with --capacitors--,
 - b) On **line 10**, replace "capacitor" with --capacitors--.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 1-2** are rejected under 35 U.S.C. 103(a) as being unpatentable over **N.V. Philips Gloeilampfabrieken (BE 389750)** in view of **Sawamoto et al. (US Patent 6583826)**.

Consider **claim 1**, N.V. Philips Gloeilampfabrieken clearly discloses an intermediate frequency circuit (figure 1, title), comprising: a pair of input nodes; a pair of output nodes; a first inductor (figure 1, inductor 2) being coupled between the pair of input nodes; a second inductor (figure 1, inductor 7) being coupled between the pair of output nodes; a first and a second capacitors (figure 1, capacitors 3 and 6), which are coupled between a first input node and a first output node; a third and a fourth capacitors (figure 1, capacitors 5 and 8), which are coupled between a second input node and a second output node; and a fifth capacitor (figure 1, capacitor 4), which is coupled between the first capacitor (figure 1, capacitor 3) and the fourth capacitor (figure 1, capacitor 8) and between the second capacitor (figure 1, capacitor 6) and the third capacitor (figure 1, capacitor 5) (page 2 line 26 - page 3 line 15, figure 1).

However N.V. Philips Gloeilampfabrieken fails to disclose the intermediate frequency circuit is connected between a frequency mixing circuit and an intermediate frequency amplifier circuit.

In the same field of endeavor, Sawamoto et al. clearly disclose an intermediate frequency circuit is connected between a mixer (figure 6, mixer 21) and an intermediate frequency amplifier (figure 6, intermediate frequency amplifier 24) (column 1 lines 12-20, figure 6).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the selection technique taught by Sawamoto et al. into the art of N.V. Philips Gloeilampfabrieken as to down convert the radio frequency (RF) signal into intermediate frequency (IF) signal using a mixer and to amplify the IF signal using an IF amplifier for processing received RF signal properly and outputting desired results.

Consider **claim 2, as applied to claim 1 above**, N.V. Philips Gloeilampfabrieken as modified by Sawamoto et al. clearly discloses the intermediate frequency circuit, wherein said first capacitor (figure 1, capacitor 3) is coupled in series to said second capacitor (figure 1, capacitor 6); and said third capacitor (figure 1, capacitor 5) is coupled in series to said fourth capacitor (figure 1, capacitor 8).

Conclusion

6. Any response to this Office Action should be **faxed to (571) 273-8300 or mailed**

to: Commissioner for Patents
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Hand-delivered responses should be brought to

Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to RuiMeng Hu whose telephone number is 571-270-1105.

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The examiner can normally be reached on Monday - Thursday, 8:00 a.m. - 5:00 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rafael Perez-Gutierrez can be reached on 571-272-7915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RuiMeng Hu
R.H./rh
August 28, 2006

EDAN ORGAD
PATENT EXAMINER/TELECOMM.

Edan Orgad 8/26/06